

California Regional Water Quality Control Board
North Coast Region

CEASE AND DESIST ORDER NO. R1-2006-0002
MODIFYING CEASE AND DESIST ORDER NO. R1-2004-0065

NPDES PERMIT NO. CA0025135
ID NO. 1B820460SON

REQUIRING THE CITY OF HEALDSBURG TO CEASE AND DESIST FROM
DISCHARGING OR THREATENING TO DISCHARGE EFFLUENT IN VIOLATION
OF WASTE DISCHARGE REQUIREMENTS, ORDER NO. R1-2005-0084

Sonoma County

The Regional Water Quality Control Board, North Coast Region (Regional Water Board) finds that:

1. The City of Healdsburg (Permittee) owns and operates facilities for municipal wastewater collection and treatment serving the City of Healdsburg.
2. The City of Healdsburg Wastewater Treatment and Disposal Facility (WWTF) is designed for an average dry weather flow rate of 1.4 million gallons per day (mgd). The current waste treatment facilities include wastewater screening and grit removal, biological secondary treatment using four aerated ponds followed by two oxidation/sedimentation ponds and disinfection. The treated wastewater is disinfected using chlorine gas and then dechlorinated. The effluent is discharged to the Basalt Pond, which is owned by Syar Industries, Inc.
3. The WWTF is located in the SE ¼ of Section 33, R9W, T9N, MDB&M and adjacent to the Russian River.
4. Section 13301 of the California Water Code states “When a regional board finds that a discharge of waste is taking place, or threatening to take place, in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventative action.”
5. The Permittee has completed environmental review for two alternative treatment technologies to upgrade the existing treatment facilities to provide advanced wastewater treatment; (1) conventional extended aeration with biological nitrogen removal (BNR) and tertiary filtration; and (2) a membrane bioreactor with BNR. The project also considered the feasibility and the potential environmental impact of alternative discharge locations, as well as agricultural and urban re-use alternatives.
6. On October 6, 2004, the Regional Water Board adopted Waste Discharge Requirements, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0025135 (Permit) for the WWTF. The NPDES Permit was modified on November 29, 2004, and on October 12, 2005. The Permit includes discharge prohibitions, effluent and receiving water limitations and compliance provisions. The Water Quality Control Plan for the North Coast

Region (Basin Plan) allows permit compliance schedules for only some requirements included in the Permit.

7. The Basin Plan includes beneficial uses, water quality objectives, implementation plans for point source and non-point source discharges, prohibitions and statewide plans and policies. The Basin Plan also includes a prohibition against discharge to the Russian River and its tributaries during the period May 15 through September 30.

8. The Basin Plan contains a narrative objective (standard) for toxicity that requires:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassay of appropriate duration or other appropriate methods as specified by the Regional Water Board.

9. Requirements in Order No. R1-2005-0084 (the requirements are numbered as in the Order) that are threatened to be violated are:

A. DISCHARGE PROHIBITIONS

7. The discharge of wastewater effluent from the WWTF to the Russian River or its tributaries is prohibited during the period May 15 through September 30 each year.

B. EFFLUENT LIMITATIONS FOR DISCHARGES TO THE BASALT POND

1. There shall be no acute toxicity in the effluent. The Permittee will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted waste complies with the following:
 - a. Minimum for any one bioassay: 70 percent survival.
 - b. Median for any three or more consecutive bioassays: at least 90 percent survival.

Compliance with this effluent limitation shall be determined in accordance with General Provision I.23.

1. Interim limits in effect until December 31, 2007:

Interim limitations to be in effect until December 31, 2007, in compliance with General Provision I.28. Secondarily treated wastewater shall not contain constituents in excess of the following limitations:

Constituent	Unit	Monthly Average	Weekly Average
BOD (20°, 5-day)	mg/l	30	45
	lb/day ¹	350	525
Suspended Solids	mg/l	30	45
	lb/day	350	525

A. GENERAL PROVISIONS

1. Duty to Comply

The Permittee shall comply with all conditions of this Order. Any instance of noncompliance with this Order constitutes a violation of the CWA and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action; for Permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. [40 CFR 122.41(a)]

The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]

1. The Permittee discharges all year to the Basalt Pond and has no discharge alternatives, at this time, to achieve compliance with Discharge Prohibition A.7 of the Permit. This year-round discharge does not comply with the Basin Plan.
2. The WWTF has failed recent toxicity tests, demonstrating that the WWTF cannot comply with Effluent Limitation B.6 of the Permit.
3. The WWTF has historically produced excessive algae growth due primarily to the design of the ponds. The ponds are shallow with a large surface area, allowing for excessive algae growth. The algae growth has often made the effluent turbid, raising the BOD and TSS levels in the discharge. In a letter received by the Regional Water Board on August 9, 2002, the Permittee proposed the addition of an effluent filtering device to remove algae and improve treatment. In a letter dated September 12, 2002, staff concurred with the concept. In a letter dated December 20, 2003, staff again requested that the Permittee take action. The Permittee did not install and begin operating the filters until July 2005.

¹ Mass based effluent limitations are based on the WWTF dry weather design flow of 1.4 mgd. During wet-weather periods when the flow rate into the WWTF exceeds the dry weather design flow, the mass emission limitations shall be calculated using the concentration-based effluent limitations and the actual daily average flow rates (not to exceed the maximum sustained peak design flow of 6.5 mgd.)

Staff received reports on February 23, 2005, and May 2, 2005, from the Permittee exploring options to improve treatment of BOD and TSS to comply with the interim secondary treatment limitations in the Permit. The reports identified the use of aquashade dye to provide chemical shading as offering potential treatment improvement. The Permittee implemented the use of aquashade dye in June 2005.

The reports included the Permittee's request to have the BOD and TSS effluent limitations from its previous (non-NPDES) permit reinstated until the advanced wastewater treatment (AWT) upgrade is completed on January 1, 2008. Staff determined that the Permittee did not submit adequate justification to warrant a compliance schedule of such long duration. The Permittee did not include evidence that the WWTF could not comply with the interim secondary treatment effluent limitations after implementation of all feasible treatment improvements. On September 15, 2005, the Permittee submitted a request for a fifteen-month compliance schedule to allow the Permittee to acquire more data and prepare a report.

4. Although the Permittee has not submitted the complete evidence required, some interim measures have been implemented. Specifically, the Permittee has installed effluent filters and begun using aquashade dye to reduce algae production. Although these measures were not implemented in the most expeditious manner, they warrant a compliance schedule of limited duration to collect monitoring data. The data will provide evidence verifying the WWTF's ability to comply with secondary treatment limitations and allow staff to determine the appropriate interim limitations.
5. Under California Water Code (CWC) section 13385(j)(3), Mandatory Minimum Penalties (MMPs) for violations of secondary treatment effluent limitations for BOD and TSS and violations of the seasonal discharge prohibition will not apply if the Regional Water Board finds that:
 - a. The Cease and Desist Order was issued on or after July 1, 2000, and specifies the actions that the discharger is required to take in order to correct the violations;
 - b. The regional board finds that the discharger is not able to consistently comply with one or more of the effluent limitations established in the waste discharge requirements applicable to the waste discharge because the effluent limitation is a new or more stringent regulatory requirement that has become applicable to the waste discharge after the effective date of the waste discharge requirements and after July 1, 2000, new or modified control measures are necessary in order to comply with the effluent limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days;
 - c. The regional board establishes a time schedule for bringing the waste discharge into compliance with the effluent limitation that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation; and
 - d. The discharger has prepared and is implementing in a timely and proper manner, a pollution, and prevention plan.

1. Secondary Treatment Effluent Limitations for BOD and TSS

The Permittee meets the requirements of CWC section 13385(j)(3) for protection from MMPs for violations of the secondary treatment effluent limitations for BOD and TSS because:

- . The CDO was issued after July 1, 2000, and specifies the actions the Permittee is required to take to correct the violations in Compliance Schedule 3 of this Order;
- . These effluent limitations are more stringent than those required by the Permittee's previous Waste Discharge Requirements, Order No. 92-80, adopted on June 15, 1992. The Permittee is not able to consistently comply with effluent limitations for BOD and TSS. To ensure consistent compliance, the Permittee will need to implement control measures; these control measures will take more than 30 calendar days to identify and install;
- . Compliance Schedule 3 of this Order establishes a time schedule for bringing the WWTF into compliance with the effluent limitations that is as short as possible, 15 months to identify, install and monitor additional control measures to comply with secondary treatment effluent limitations; and
- . The Permittee has submitted several reports designed to identify and control pollution that serve as a pollution prevention plan.

2. Seasonal Discharge Prohibition

The Permittee meets the requirements of CWC section 13385(j)(3) for protection from MMPs for violations of the seasonal discharge prohibition because:

- a. The Cease and Desist Order was issued after July 1, 2000, and specifies the actions the Permittee is required to take to correct the violations in Compliance Schedule 1 of this Order;
 - b. This discharge prohibition is newly applied to the Permittee because the WWTF was not subject to the prohibition in its previous Waste Discharge Requirements, Order No. 92-80, adopted on June 15, 1992. The Permittee will need to develop a dry season disposal alternative that will take more than 30 calendar days to identify and install;
 - c. Compliance Schedule 1 of this Order establishes a time schedule for bringing the waste discharge into compliance with the seasonal discharge prohibition that is as short as possible, five years to identify and construct a comprehensive dry season disposal plan; and
 - d. Compliance Schedule 1 requires submittal of a plan and progress reports designed to identify and construct a disposal alternative to comply with the seasonal discharge prohibition that serve as a pollution prevention plan.
0. Accordingly, the Regional Water Board finds that MMPs for violations of effluent limitations for BOD, TSS, and seasonal discharges to the Russian River do not apply, so long as the Permittee complies with the interim limitations and compliance schedules included in this Order.
0. On January 8, 1995, the Russian River flooded and created a 100-foot breach in the Basalt Pond levee. As a consequence of the levee failure, treated wastewater from the WWTF was

discharged to the Russian River in violation of Waste Discharge Requirements, Order No. 92-80, for approximately seven days until emergency repairs were completed. On March 11, 1995, floodwaters again caused a levee failure resulting in six additional days of discharge to the Russian River. On January 1, 1997, the Russian River breached the levee again. These discharges also constituted a violation of the Clean Water Act. In response to these discharges to the Russian River two previous Cease and Desist Orders were adopted by the Regional Water Board. Cease and Desist Order No. 97-27 rescinded and replaced Cease and Desist Order No. 95-97 and required the Permittee to develop a short- and long-term project to be completed by October 1, 2001. To date, these projects have not been completed and the Permittee is in violation of Cease and Desist Order No. 97-27.

0. With the recent court decision, *Northern California River Watch vs. the City of Healdsburg*, and the determination that the Basalt Pond is Waters of the United States, the previous Cease and Desist Order No. 97-27 will be superceded to reflect current conditions as provided for in Order No. R1-2005-0084 as necessary to protect receiving waters.
0. This enforcement action is exempt from the requirements of the California Environmental Quality Act pursuant to Title 14 of the California Code of Regulations, section 15321.
0. On January 25, 2006, after due notice to the Permittee and all other affected persons, the Regional Water Board conducted a public hearing and evidence was received regarding this Cease and Desist Order.

THEREFORE, IT IS HEREBY ORDERED, pursuant to CWC section 13301, that Cease and Desist Order No. 97-27 and Cease and Desist Order No. R1-2004-0065 are rescinded except for enforcement purposes and replaced by this Order and the City of Healdsburg shall cease discharging waste in violation of Waste Discharge Requirements, Order No. R1-2005-0084 forthwith in accordance with the following time schedules:

1. Schedule to Cease Discharging Municipal Wastewater to the Basalt Pond between May 15th and September 30th as Required by Discharge Prohibition A.7 of Waste Discharge Requirements Order No. R1-2005-0084.

<u>Task</u>	<u>Compliance Date</u>
Submit ² a plan and a schedule to comply with Discharge Prohibition A.7 of Waste Discharge Requirements Order No. R1-2005-0084.	October 6, 2005
Submit written progress reports ³ on compliance efforts to the Executive Officer. Regional Water Board staff may periodically present an informational update to the Regional Water Board	April 6, 2006 October 6, 2006 April 6, 2007

² The term "submit" in this Order means that the document must be actually received by the Regional Water Board on or before the associated compliance date.

³ The progress reports shall describe what steps have been implemented towards achieving compliance with waste discharge requirements, including construction progress, evaluate the effectiveness of the implemented measures and assess whether additional measures are necessary to meet the time schedule.

<u>Task</u>	<u>Compliance Date</u>
based on the progress reports.	October 6, 2007 April 6, 2008 October 6, 2008 April 6, 2009 October 6, 2009
Achieve compliance with Discharge Prohibition A.7 of Waste Discharge Requirements Order No. R1-2005-0084.	October 6, 2009

2. Schedule to Cease Discharging Acutely Toxic Effluent to the Basalt Pond as Required by Effluent Limitation B.6 of Waste Discharge Requirements Order No. R1-2005-0084.

<u>Task</u>	<u>Compliance Date</u>
Submit a Toxicity Reduction Evaluation (TRE) in accordance with the guidelines in General Provision I.25 of Waste Discharge Requirements, Order No. R1-2005-0084.	October 6, 2005
Submit a workplan to implement control measures or management practices to comply with Effluent Limitation for Discharges to the Basalt Pond B.6.	October 6, 2006
Complete implementation of control measures and management practices. Achieve compliance with Effluent Limitation for Discharges to the Basalt Pond B.6.	January 1, 2008

1. Schedule to Cease Discharging Effluent with Levels of BOD and TSS Greater than Secondary Treatment Limitations to the Basalt Pond as Required by Effluent Limitation B.9 of Waste Discharge Requirements, Order No. R1-2005-0084.

<u>Task</u>	<u>Compliance Date</u>
Submit quarterly written progress reports ⁴ on compliance efforts to the Executive Officer. Regional Water Board staff may periodically present an informational update to the Regional Water Board based on the progress reports. The Permittee is required to continue operating the WWTF to the best of its ability including continuing the interim control measures such as the filters and use of aquashade as well as exploring and implementing additional interim control measures. The Permittee shall include a discussion of the WWTF operations	April 15, 2006 July 15, 2006 October 15, 2006 January 15, 2007

⁴ The progress reports shall describe what steps have been implemented towards achieving compliance with waste discharge requirements, including construction progress, analyze quarterly data, evaluate the effectiveness of the implemented measures and assess whether additional measures are necessary to meet the time schedule.

<u>Task</u>	<u>Compliance Date</u>
including current interim control measures in use and additional control measures.	
Achieve compliance with Effluent Limitation B.9 for BOD and TSS.	March 7, 2007

4. Interim limits in effect until March 7, 2007:

Treated wastewater shall not contain constituents in excess of the following limitations:

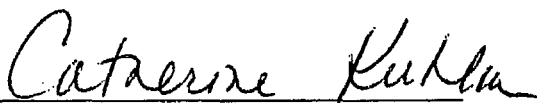
Constituent	Unit	Monthly Average	Weekly Average
BOD (20°, 5-day)	mg/l	50	80
	lb/day ⁵	584	934
Suspended Solids	mg/l	50	80
	lb/day	584	934

5. The Permittee shall not incur MMPs for violations of effluent limitations for **BOD**, TSS, and seasonal discharges to the Russian River, so long as it complies with the **interim** limitations and compliance schedules included in this Order.

IT IS FURTHER **ORDERED** that if, in the opinion of the Executive Officer, the Permittee fails to comply with the provisions of **this** Order, the Executive Officer may apply to ~~the~~ Attorney General for **judicial** enforcement or issue a complaint for Administrative Civil Liability.

Certification

I, Catherine Kuhlman, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Cease and Desist Order adopted by the California Regional Water Quality Control Board, North Coast Region, on January 25, 2006.


Catherine E. Kuhlman
Executive Officer

⁵ Mass based effluent limitations are based on the WWTF dry weather design flow of 1.4mgd. During wet-weather periods when the **flow** rate into the **WWTF** exceeds the dry weather design flow, the **mass** emission limitations shall be calculated using the concentration-based effluent limitations and the actual daily average flow rates (not to exceed the maximum sustained peak design flow of 6.5 mgd.)